What Works Clearinghouse™



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WWC Review of the Report "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment" 1

The findings from this review do not reflect the full body of research evidence on providing financial aid assistance or information.

What is this study about?

In this study, the authors examined the impact of two interventions related to the Free Application for Federal Student Aid (FAFSA) on postsecondary outcomes of low- to moderate-income individuals. The two interventions were included (1) providing an estimate of need-based aid compared against tuition costs for nearby colleges and assistance in completing the FAFSA, and (2) only providing an estimate of need-based aid. The interventions were implemented by tax professionals in H&R Block offices in the Charlotte, North Carolina area and throughout the state of Ohio. The authors examined the impact of the interventions on four postsecondary outcomes: the likelihood of filing the FAFSA, college enrollment, receipt of a Pell Grant, and retention in college after 2 years.2

Study authors measured the effects of the two FAFSA interventions by comparing the outcomes of three research groups created through random assignment based on the tax filers' Social Security numbers: a FAFSA intervention group (which received an estimate of need-based aid and assistance in completing the FAFSA); an information-only intervention group (which only received an estimate of need-based aid); and a no-intervention comparison group.

In total, almost 17,000 individuals were included in the analytic samples described in the study. The authors distinguished between three groups of participants when presenting results: (a) 17-year-old high school seniors and recent graduates who were dependent on their parents; (b) independent adults aged 24 to 30 years with no college experience; and (c) independent adults aged 24 to 30 years with some college, but no degree.³

Features of the Free Application for Federal Student Aid (FAFSA) Experiment

The FAFSA is an eight-page, detailed application that must be completed to receive federal financial aid.

Participants identified for this study were from households with low- to moderate-income (less than \$45,000) who had received tax-preparation assistance at H&R Block and had a family member aged 15 to 30 years with no bachelor's degree.

For the FAFSA intervention group members, tax professionals first conducted a brief interview to collect information needed to complete the FAFSA. These professionals then used interview responses and tax return data to provide assistance with completing the FAFSA and to provide an estimate of the amount of need-based aid the participant would receive.

For the information-only group, tax preparers used data from tax returns to provide an estimate of the amount of need-based aid they would receive, but assistance completing the FAFSA was not provided.

Comparison group members were provided a brochure containing general information on college costs and financial aid, but received no direct help completing the FAFSA and no personalized aid estimation.

What did the study find?

The study found that the group of 17-year-old high school seniors and recent graduates (dependents) who received the FAFSA intervention were significantly more likely than the comparison group to submit the FAFSA (56% vs. 40%), attend college (42% vs. 34%), and enroll in college for 2 consecutive years (36% vs. 28%).

Independent adults aged 24–30 with no prior college experience who received the FAFSA intervention were significantly more likely than the comparison group to submit the FAFSA (43% vs. 16%), and enroll in college (12% vs. 10%).

Independent adults aged 24–30 with prior college experience who received the FAFSA intervention were significantly more likely than the comparison group to submit the FAFSA (52% vs. 32%).

The study found no statistically significant differences between the information-only group and the comparison group on any outcomes.

WWC Rating

The research described in this report meets WWC evidence standards with reservations

Strengths: This study is a well-executed randomized controlled trial.

Cautions: This study was based on a randomized controlled trial; however, impacts were presented for three distinct subgroups, and attrition for each of the subgroups cannot be calculated due to unknown subgroup information at baseline.⁴ For this reason, this study was reviewed as a quasi-experimental design. All comparisons presented in this report meet WWC standards with reservations.⁵

Appendix A: Study details

Bettinger, E., Long, B., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *Quarterly Journal of Economics*, 127(3), 1205–1242.

Setting

The FAFSA experiment was conducted in 156 H&R Block tax preparation offices located in the Charlotte, North Carolina area, as well as throughout the state of Ohio.

Study sample

The sample of participants came from households earning less than \$45,000 a year with at least one household member between the ages of 15 and 30 without a bachelor's degree. When more than one individual in the household was eligible, the independent adult closest to age 18 was selected. There were three samples of interest presented in the study, and assignment was determined randomly according to the participant's Social Security number. The three groups were: (a) 17-year-old high school seniors and recent graduates who were still dependent on their parents (analysis sample sizes were 390 FAFSA, 80 information-only, and 398 comparison group members); (b) 24- to 30-year-old independent adults with no prior college experience (analysis sample sizes were 4,389 FAFSA, 722 information-only, and 4,117 comparison group members); and (c) 24- to 30-year-old independent adults with some prior college experience (analysis sample sizes were 3,085 FAFSA, 517 information-only, and 3,044 comparison group members). Each participant was offered \$20.

Intervention group

Two intervention conditions, the FAFSA intervention and the information-only intervention, were implemented immediately after a family's taxes were completed at a local H&R Block tax office. Participants in the FAFSA intervention group received personal assistance completing and filing the FAFSA through the use of tax software that completed two-thirds of the FAFSA based on their completed tax returns and an interview to obtain the remaining information. Potential financial aid amounts were then provided to the individual along with tuition estimates for four local colleges. Seventy percent of participants in this condition had their FAFSA completed by H&R Block. For those in the information-only intervention, potential financial aid amounts based on tax information were provided to individuals along with tuition estimates for four local colleges. Participants in both intervention groups also received information on the importance of college and a financial aid brochure.

Comparison group

Tax professionals provided comparison group families with information on the importance of college as well as a financial aid brochure.

Outcomes and measurement

The four outcomes included in this review were: (a) submitting the FAFSA within 1 year of the experiment; (b) enrolling in college within 1 year of the experiment; (c) receiving a Pell Grant within 1 year of the experiment; and (d) retention in college as measured by enrolling in college in each of the 2 years following the experiment. For a more detailed description of these outcome measures, see Appendix B.

Support for implementation

Tax preparers were trained on the *FAFSA experiment's* procedures. The tax preparers were then monitored closely at first in order to identify and correct the process when it was not carried out correctly.

Reason for review

This study was identified for review by the WWC because it was partially supported by a grant to the National Bureau of Economic Research (Principal Investigator: Eric Bettinger) from the National Center for Education Research (NCER) at the Institute of Education Sciences (IES).

Appendix B: Outcome measures for each domain

Assistance for college	
Filed FAFSA during first year following experiment	FAFSA filing was based on data obtained from the U.S. Department of Education (ED) on the universe of FAFSA applications. This outcome was based on a 1-year time window from the time of the experiment.
Received Pell Grant while attending college during first year following experiment	Receipt of a Pell Grant was based on data obtained from the U.S. ED on the universe of Pell Grant recipients. This outcome was based on a 1-year time window from the time of the experiment.
College attendance	
Enrolled in college during first year following experiment	College enrollment was based on a combination of data from the Ohio Board of Regents (OBR) and the National Student Clearinghouse (NSC) on college enrollment. The NSC covers 92.3% of all student enrollments in North Carolina and Ohio. Enrollment was defined as enrolling in one of the schools listed in the OBR or the NSC within 1 year following the experiment.
Retention in college for 2 consecutive years following experiment	College retention was based on a combination of data from the OBR and the NSC on college enrollment. The NSC covers 92.3% of all student enrollments in North Carolina and Ohio. Retention was defined as enrolling in any one of the schools listed in the OBR or the NSC for 2 consecutive years following the experiment.

Table Notes: The authors identified these as primary outcomes of interest for specific populations. Enrolling in college was the primary outcome of interest for dependents and independent adults with no prior college experience, while receiving a Pell grant was the primary interest for independent adults with prior college experience. The authors also highlight retention for dependents and adults with prior college experience, although results for those with prior college experience are not included in the study. Twenty-two additional outcomes were examined in this study but were not included in this report because they were not identified as primary outcomes of interest by the study authors. They include: (1) attended public college; (2) attended private college; (3) attended 4-year college; (4) attended 2-year college; (5) attended full-time; (6) attended part-time; (7) attended in-state; (8) attended out-of-state; (9) total schedule amount of federal grants; (10) received federal student loan; (11) date of FAFSA filing 2008 conditional on filing; (12) attended college in second year after experiment, April 2009 to March 2010; (14) first entered college in third year after experiment, April 2009 to March 2010; (14) first entered college in first, second, or third year after experiment, April 2010 to December 2010; (16) total years in college, April 2008 to December 2011; (17) received Pell Grant in second year after experiment, April 2009 to March 2010; (19) first received Pell Grant in third year after experiment, April 2010 to December 2010; (20) received Pell Grant in first, second, or third year after experiment, April 2010 to December 2010; (21) received Pell Grant in first, second, or third year after experiment, April 2010 to December 2010; (21) received Pell Grant, April 2008 to December 2011; and (22) total years received Pell Grant, April 2008 to December 2011.

Appendix C.1: Study findings for each domain—FAFSA intervention compared to comparison

			Mean (standard deviation)		WWC calculations			
Domain and outcome measure	Study sample	Sample size	Intervention group	Comparison group	Mean difference	Effect size	Improvement index	<i>p</i> -value
Assistance for college								
Filed FAFSA during first year following experiment	Dependents	788 participants	0.56	0.40	0.16	0.38	+15	< 0.05
Filed FAFSA during first year following experiment	Independents, no prior college	8,506 participants	0.43	0.16	0.27	0.82	+30	< 0.05
Filed FAFSA during first year following experiment	Independents, prior college	6,129 participants	0.52	0.32	0.20	0.49	+19	< 0.05
Received Pell Grant while attending college during first year following experiment	Independents, prior college	6,129 participants	0.23	0.21	0.02	0.06	+2	> 0.05
Domain average of assistan	ce for college					0.44	+17	Statistically significant
College attendance								
Enrolled in college during first year following experiment	Dependents	788 participants	0.42	0.34	0.08	0.21	+8	< 0.05
Enrolled in college during first year following experiment	Independents, no prior college	8,506 participants	0.12	0.10	0.02	0.10	+4	< 0.05
Retention in college for 2 consecutive years following experiment	Dependents	788 participants	0.36	0.28	0.08	0.22	+9	< 0.05
Domain average of college a	attendance					0.18	+7	Statistically significant

Table Notes: Positive results for mean difference, effect size, and improvement index favor the intervention group; negative results favor the comparison group. The effect size is a standardized measure of the effect of an intervention on student outcomes, representing the change (measured in standard deviations) in an average student's outcome that can be expected if the student is given the intervention. The improvement index is an alternate presentation of the effect size, reflecting the change in an average student's percentile rank that can be expected if the student is given the intervention. The WWC-computed average effect size is a simple average rounded to two decimal places; the average improvement index is calculated from the average effect size. The statistical significance of the study's domain average was determined by the WWC.

Study Notes: Multiple comparison adjustments that were performed for outcomes using the same sample within the same domain aligned with the authors' calculations. The p-values presented here were reported in the original study. The FAFSA intervention is characterized as having a statistically significant positive effect on both receiving assistance for college and college attendance because univariate statistical tests are reported for each outcome measure, the effect for at least one measure within the domain is positive and statistically significant, and no effects are negative and statistically significant.

Appendix C.2: Study findings for the assistance for college domain—information-only intervention compared to comparison

			Mean (standard deviation)		WWC calculations			
Domain and outcome measure	Study sample	Sample size	Intervention group	Comparison group	Mean difference	Effect size	Improvement index	<i>p</i> -value
Assistance for college								
Filed FAFSA during first year following experiment	Dependents	478 participants	0.37	0.40	-0.03	-0.09	-3	> 0.05
Filed FAFSA during first year following experiment	Independents, no prior college	4,839 participants	0.14	0.16	-0.02	-0.11	-4	> 0.05
Filed FAFSA during first year following experiment	Independents, prior college	3,561 participants	0.35	0.32	0.03	0.07	+3	> 0.05
Domain average of assistan	ice for college					-0.04	-0.02	Not statistically significant

Table Notes: Positive results for mean difference, effect size, and improvement index favor the intervention group; negative results favor the comparison group. The effect size is a standardized measure of the effect of an intervention on student outcomes, representing the change (measured in standard deviations) in an average student's outcome that can be expected if the student is given the intervention. The improvement index is an alternate presentation of the effect size, reflecting the change in an average student's percentile rank that can be expected if the student is given the intervention. The WWC-computed average effect size is a simple average rounded to two decimal places; the average improvement index is calculated from the average effect size. The statistical significance of the study's domain average was determined by the WWC.

Study Notes: No corrections for clustering or multiple comparisons were needed. The *p*-values presented here were reported in the original study. The comparisons for the information-only intervention condition required baseline adjustments due to baseline differences in gender and adjusted gross income that were larger than 0.05 standard deviations. Since the authors reported the results of an analysis that controls for these and other baseline characteristics in Table IV of the study, we report those comparisons for the information-only intervention condition. The information-only intervention is characterized as having an indeterminate effect on assistance for college because univariate statistical tests are reported for each outcome measure, and none are statistically significant or substantively important.

Endnotes

- ¹ Single study reviews examine evidence published in a study (supplemented, if necessary, by information obtained directly from the author[s]) to assess whether the study design meets WWC evidence standards. The review reports the WWC's assessment of whether the study meets WWC evidence standards and summarizes the study findings following WWC conventions for reporting evidence on effectiveness. This study was reviewed using the single study review protocol, version 2.0. This review is based on the final/published version of the study. In December 2010, the WWC reviewed a working paper of this study that examined some of the same outcomes (the earlier review can be found here: http://ies.ed.gov/ncee/wwc/quickreviewsum.aspx?sid=142). The final study, which includes additional findings on longer-term outcomes, serves as the basis for this review, and replaces the initial assessment based on the working paper.
- ² There were 22 outcomes included in the study that are not described in this WWC report. See the table notes in Appendix B for more information. Because the FAFSA intervention included assistance in filing the FAFSA, the filing FAFSA outcome could be considered an overaligned outcome. However, the outcome is not excluded in this review, since completing the FAFSA is not a guaranteed outcome when receiving the intervention.
- ³ Some of the comparisons of outcomes presented in the study are excluded from this review because the authors purposefully identified primary comparisons of interest. For each of the intervention arms and subgroups of participants, the authors identified outcomes that would be most relevant. Specifically, on p. 21 of the published report, the authors state that their "main analysis is limited to a very small number of pre-specified questions: (1) Does FAFSA filing increase with FAFSA or information treatments? (2) Does FAFSA treatment increase college enrollment for dependents or independents with no prior college? and (3) Does FAFSA treatment increase financial aid receipt for those already going to college?" Based on this, the WWC focused the review on comparisons of all three participant subgroups and all three intervention conditions for the first question; we include only the FAFSA and comparison conditions and only the dependents and independents with no prior college for the second question; and we include only the FAFSA and comparison conditions and only the independents with prior college experience for the third question. Given the emphasis on college retention for the dependent sample in the study abstract, we include the retention outcome for dependents only. Finally, because the study authors included the information-only group solely for the purposes of detecting differences in FAFSA submission rates (see p. 1219 of the published report), when examining impacts for the information-only group, we only present impacts on the FAFSA submission outcome.
- ⁴ According to WWC correspondence with the authors, there is insufficient information about the initial sample sizes (at the time of random assignment) for each of the three subgroups for which impacts are presented. This fact precludes our ability to assess attrition for each of the comparisons and results in the review of the study as a quasi-experimental design instead of a randomized controlled trial. It should be noted that attrition is low for the overall independent sample; however, impact analyses were not presented for the full sample of independents (only for the subgroups of independents with and without prior college experience).
- ⁵ A working paper version of this study was previously reviewed as a quick review under earlier versions of the WWC standards. For that publication, the WWC determined that the contrasts focusing on the pooled independent adult sample receiving the FAFSA intervention met WWC standards without reservations. Using the current version of the WWC Evidence Standards (version 2.1) for the unpooled independent adult sample, it was necessary to assess the attrition levels of the analytic samples on which results are presented, and in this study, there was insufficient information available to determine attrition levels for each of the two independent adult subsamples. As such, these comparisons were only eligible to meet WWC standards with reservations. In the same quick review, it was also found that the contrasts focusing on the information-only intervention for the pooled independent sample did not meet WWC evidence standards because the groups differed on previous college enrollment. Because the updated version of the study presents results by previous college enrollment, these baseline differences no longer exist. The authors further demonstrate equivalence for the information-only contrasts. Therefore, for this review, the information-only contrasts meet standards with reservations.

Recommended Citation

U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2013, November). WWC review of the report: The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. Retrieved from http://whatworks.ed.gov

Glossary of Terms

Attrition Attrition occurs when an outcome variable is not available for all participants initially assigned to the intervention and comparison groups. The WWC considers the total attrition rate and

the difference in attrition rates across groups within a study.

Clustering adjustment If intervention assignment is made at a cluster level and the analysis is conducted at the student level, the WWC will adjust the statistical significance to account for this mismatch, if necessary.

Confounding factor A confounding factor is a component of a study that is completely aligned with one of the

study conditions, making it impossible to separate how much of the observed effect was

due to the intervention and how much was due to the factor.

Design The design of a study is the method by which intervention and comparison groups were assigned.

Domain A domain is a group of closely related outcomes.

Effect size The effect size is a measure of the magnitude of an effect. The WWC uses a standardized

measure to facilitate comparisons across studies and outcomes.

Eligibility A study is eligible for review if it falls within the scope of the review protocol and uses either

an experimental or matched comparison group design.

Equivalence A demonstration that the analysis sample groups are similar on observed characteristics

defined in the review area protocol.

Improvement index Along a percentile distribution of students, the improvement index represents the gain

or loss of the average student due to the intervention. As the average student starts at

the 50th percentile, the measure ranges from -50 to +50.

Multiple comparison When a study includes multiple outcomes or comparison groups, the WWC will adjust

adjustment the statistical significance to account for the multiple comparisons, if necessary.

Quasi-experimental A quasi-experimental design (QED) is a research design in which subjects are assigned design (QED) to intervention and comparison groups through a process that is not random.

Randomized controlled A randomized controlled trial (RCT) is an experiment in which investigators randomly assign

trial (RCT) eligible participants into intervention and comparison groups.

Single-case design A research approach in which an outcome variable is measured repeatedly within and

(SCD) across different conditions that are defined by the presence or absence of an intervention.

Standard deviation The standard deviation of a measure shows how much variation exists across observations

in the sample. A low standard deviation indicates that the observations in the sample tend to be very close to the mean; a high standard deviation indicates that the observations in

the sample are spread out over a large range of values.

Statistical significance Statistical significance is the probability that the difference between groups is a result of

chance rather than a real difference between the groups. The WWC labels a finding statistically significant if the likelihood that the difference is due to chance is less than 5% (p < 0.05).

Substantively important A substantively important finding is one that has an effect size of 0.25 or greater, regardless

of statistical significance.

Please see the WWC Procedures and Standards Handbook (version 2.1) for additional details.